

REMARKS

Favorable reconsideration of this application is respectfully requested.

Claims 6, 7, 9, and 10 are amended by the present response to address the misspelling noted therein.

Claims 1-17 are pending in this application. Claim 17 was rejected under 35 U.S.C. § 101. Claims 1-10, 16, and 17 were rejected under 35 U.S.C. § 102(a) as anticipated by U.S. patent application publication 2002/0152381 to Kuriya et al (herein "Kuriya"). Claims 11 and 13-15 were rejected under 35 U.S.C. § 103(a) as unpatentable over Kuriya in view of U.S. patent 6,526,581 to Edson. Claim 12 was rejected under 35 U.S.C. § 103(a) as unpatentable over Kuriya and U.S. patent application publication 2003/0115485 to Milliken.

Addressing the rejection under 35 U.S.C. § 101, claim 17 is amended by the present response to be more clearly directed to a computer program product "embodied on the computer readable medium". Claim 17 also clarifies the different computer program codes being "loaded in a processing unit". Such claim amendments are believed to clearly indicate the subject matter in claim 17 is directed to a tangible computer readable medium, and thus claim 17 is believed to be proper under 35 U.S.C. § 101.

Addressing now the above-noted prior art rejections, those rejections are traversed by the present response.

Independent claim 1 is amended by the present response to clarify features therein, and to particularly clarify the identification information of the outside communication device stored in the identification information memory is "prepared at least on the basis of the device ID of the outside communication device uniquely assigned beforehand among all copyright protection devices worldwide". That claimed subject matter is supported by the original specification for example at page 15, line 10 et seq. Independent claims 16 and 17

are also similarly amended. Independent claims 1, 16, and 17 also clarify language of the “bridge processing unit” and the “fourth computer program code”.

The claims are directed to a communication relay device, communication system, and computer program embodied on a computer readable medium in which a digital transmission content protection (DTCP) can be seamlessly expanded to be used outside of, for example, a home network, by expanding a mechanism realized by the DTCP externally.

DTCP is a known mechanism for realizing copyright protection on a network, and allows transmitting AV data with copyright protection on an internal network.¹ The applicants of the present invention recognized that with current systems it has not been possible to expand the current DTCP to be used externally.²

To address such a drawback recognized by the applicants of the present invention, the claimed inventions can control transmission/reception of data that require copy protection from an internal network, for example inside a user’s home, and externally. With respect to Figure 1 in the present specification as a non-limiting example, an outside DTCP bridge 4 can be utilized to control such transmission/reception.

Such objectives of the present invention fundamentally differ from the disclosures in the primary reference to Kuriya, which is directed to a specific information providing apparatus or method that can manipulate contents, and that has its operation restricted by usage conditions.³ Kuriya in that respect is not at all directed to similar features as in the claimed invention of expanding the use of copyright material from a home network 3 to devices external of that home network, see to Figure 1 in the present specification as a non-limiting example.

The outstanding grounds for rejection relies on Kuriya to disclose the claimed “first copyright protection unit” and “second copyright protection unit”. The rejection cites Kuriya

¹ Specification at page 2, line 14 to page 3, line 2.

² Specification at page 3, lines 12-20.

³ Kuriya at [0001].

at paragraphs [0255] and [0256], and at Figure 20, item 223, with respect to the claimed “first copyright protection unit” and cites Kuriya at paragraphs [0219]-[0221], [0249]-[0250], and at Figure 20, item 221, with respect to the claimed “second copyright protection unit”.⁴

Applicants traverse that grounds for rejection as applicants note the noted descriptions in Kuriya do not at all indicate that “a first authentication and key exchange processing” are carried out or that a “second authentication and key exchange processing” are carried out “based on a scheme *different from the first authentication and key exchange*” (emphasis added).

In the claims as written, by utilizing different schemes for first and second copyright protections, for example for communication inside a network and external to the network, it becomes possible to effectively protect a copyright from unauthorized copying without compromising user-friendliness.

In contrast to the claimed “first copyright protection unit” and “second copyright protection unit”, Kuriya merely employs one authentication and key exchange processing scheme. The network 3 of Kuriya may be either a home network or a global network, but in each case only a *single* authentication and key exchange processing scheme is utilized in Kuriya.

The outstanding grounds for rejection also relies on Kuriya to disclose the claimed “identification information memory unit” at Figure 20, item 224, and in Figure 22.⁵

Applicants traverse that further grounds for rejection and note the contact database 224 of Kuriya is only used to store content information, and is not used to store authentication information. The device ID of Kuriya is always associated with an entry of content information, and is used only to identify the location of the entry of content

⁴ Office Action of July 5, 2007, the paragraph bridging pages 3 and 4 and the first paragraph on page 4.

⁵ Office of July 5, 2007, page 4, second full paragraph.

information. In Kuriya an outside communication device may possibly be allowed to receive the content information even if its ID is not registered in the content database.

In contrast to Kuriya, in the present invention, by making use of a device ID of an outside communication device as authentication information, it becomes possible to effectively protect a copyright from unauthorized access.

Moreover, as further clarified in independent claims 1, 16, and 17, the stored “identification information of the outside communication device” is:

prepared at least on the basis of the device ID of the outside communication device uniquely assigned beforehand among all copyright protection devices worldwide.

Kuriya clearly fails to disclose or suggest the content database 224 storing such identification information.

Independent claims 1, 16, and 17 also clarify that the bridge processing unit carries out transmission/reception of “content that requires copyright protection between the home network and the outside network”. That further feature is believed to distinguish over Kuriya as again Kuriya is not directed to a device for transmission/reception of copyright information between a home network and an outside network. The network 3 of Kuriya is either a home network or a global network.

In view of the foregoing comments applicants respectfully submit each of independent claims 1, 16, and 17, and the claims dependent therefrom, clearly distinguish over Kuriya.

Moreover, applicants note no further disclosures in Edson or Milliken were cited to cure the above-noted deficiencies in Kuriya, and no further teachings in Edson or Milliken are directed to the features as clarified in the claims. Thus, those further rejections are traversed by the present response.

Applicants also point out features in certain of the dependent claims have not been properly considered. For example with respect to dependent claim 3, the outstanding rejection indicates Kuriya discloses the claimed “registration control unit configured to prohibit a deletion of a stored identification information in the identification information memory unit” of the contents database 224.

In reply to that further grounds for rejection, applicants note the content database 224 of Kuriya is not a database for registering outside communication devices that are allowed to access the data. In addition, according to the features in claim 3, devices can be prohibited from deleting a stored identification information in the identification information memory unit, which makes security highly reliable. Such a feature may be included since if multiple registrations by repeating a deletion and a re-registration were allowed, it may become possible to transmit information to an outside device for practically an unlimited number of times by repeating such a registration. The applicants of the present invention recognized such a potential problem, which can be addressed by the features of claim 3. Kuriya is not directed to any similar features.

In such ways dependent claim 3 is believed to be even further distinguished over the applied art.

With respect to dependent claim 11, the outstanding rejection additionally cites Edson, but applicants submit that further grounds for rejection does not meet the features in claim 11.

With respect to claim 11 the outstanding rejection specifically cites Edson at Figures 1-2, column 5, lines 36-56, column 11, lines 20-40, column 8, lines 39-51, column 10, lines 46-65, and column 6, lines 44-56.⁶ In reply to that grounds for rejection applicants point out the web page as recited in claim 11 is used to control transmission of content that requires

⁶ Office Action of July 5, 2007, page 9, second paragraph.

copyright protection such that the user can make seamless use of the content either at home or outside the home network. Contrary to this, the web page of Edson is merely used to configure an in-home network system. In Edson there is no description that the web page can be accessed from an outside communication device.

In such ways no disclosures in Edson are believed to cure the deficiencies in Kuriya with respect to dependent claim 11.

In view of the foregoing comments, applicants respectfully submit the claims as written distinguish over the applied art.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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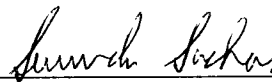
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